Application No.: 10/709,126

Docket NO.: 12573-US-PA

AMENDMENT

To the Claims:

Claim 1. (currently amended) An external bilateral telephone interface remote

control system, comprising:

an external remote control host, having an input terminal coupled to a phone line

and an output terminal coupled to an separate external addition-type remote control

extension that is detachably coupled to at least one wire or wireless switch of a separate

equipment for forming a remote control network as to control the wire or wireless switch

via a phone, wherein

the external remote control host comprises:

a phone interface processing unit, adapted for processing and receiving

phone signals;

a memory unit, adapted for storing a preset remote control code;

a processing unit, adapted for identifying and processing a control signal

from the phone line;

a display unit, adapted for displaying a power situation of the external remote

control extension separate external addition-type remote control extension; and

a RF wireless transceiving unit, adapted for receiving and transmitting

correct control signals between from the processing unit and a RF wireless

transceiving unit of the external remote control extension separate external

addition-type remote control extension,

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the external remote control extension separate external addition-type remote control

extension further comprises:

a feed back module, adapted for generating a feedback signal;

a processing unit, adapted for identifying and processing a remote control

signal from the RF wireless transceiving unit of the external remote control

extension separate external addition-type remote control extension and the

feedback signal from the feedback module;

a switch driving module, adapted for turning on or off the wire or wireless

switch according to the remote control signal from the processing unit; and

an address encoding unit, adapted for encoding the on or off of the wire or

wireless switch, thereby performing the bilateral remote control via the remote

control network and the phone line.

Claim 2. (original) The external bilateral telephone interface remote control

system of claim 1, wherein the external remote control host further comprises a power

supply and a battery charging and detecting unit disposed between the processing unit and

the power supply.

Claim 3. (original) The external bilateral telephone interface remote control

system of claim 1, wherein the external remote control host further comprises a keyboard

unit coupled to the processing unit.

Claim 4. (currently amended) The external bilateral telephone interface remote

control system of claim 1, wherein the separate external addition-type remote control

extension external remote control extension further comprises:

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a super display, comprising a phone interface processing unit, adapted for

receiving and transmitting a phone signal;

a memory, adapted for storing a preset remote control code;

a processing unit, adapted for identifying and processing a remote control signal;

and

a display unit, adapted for displaying an operation condition of wire or wireless

equipment coupled to the external remote control extension separate external

addition-type remote control extension.

Claim 5. (original) The external bilateral telephone interface remote control

system of claim 4, wherein the super display further comprises a power supply and a

battery charging and detecting unit disposed between the processing unit and the power

supply.

Claim 6. (original) The external bilateral telephone interface remote control

system of claim 4, wherein the super display further comprises a keyboard unit coupled to

the processing unit.

Claim 7. (currently amended) The external bilateral telephone interface remote

control system of claim 1, wherein the switch driving module comprises a motor, a

sensing unit disposed in an the separate equipment and a sensing driving unit coupled to

the sensing unit and the switch driving module.

Claim 8. (original) The external bilateral telephone interface remote control

system of claim 1, wherein the switch driving module comprises:

a switch driving circuit unit;

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a motor;

a cam fixed at the axis of the motor;

a spring stick disposed between the cam and a manual switch of a magnetic lock,

wherein when the RF wireless transceiving unit receives a remote switching signal from

the remote control host, the remote switching signal is transmitted to and processed by the

processing unit for generating a control signal, which passes through the switch driving

circuit unit to the motor for rotating a proper angle as to push the button of the magnetic

lock upward, turn on a circuit of the magnetic lock for unlocking the lock.

Claim 9. (original) The external bilateral telephone interface remote control

system of claim 8, wherein the switch driving module further comprises a manual spring

stick over the spring stick, the manual spring stick has two legs for avoiding conflict with

the cam, and when the manual spring stick is pushed downward, the lock is unlocked.

Claim 10. (original)The external bilateral telephone interface remote control

system of claim 1, wherein the switch driving module comprises:

a switch driving circuit unit;

a motor; and

a small gear fixed on the axis of the motor, the small gear gearing with a big gear,

which is fixed at a bottom of a spring stick, a lateral enabling stick fixed at the bottom of

the spring stick, the lateral enabling stick is movable along a U-trench between a manual

gas switch and the big gear.

Claim 11. (original) The external bilateral telephone interface remote control

system of claims 8, wherein the feedback module comprises:

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a Hall device, disposed on a side of the remote control extension and coupled to a

sensing driving circuit unit; and

a magnet, disposed at a side edge of a door corresponding to the Hall device for

determining whether the door is opened by magnetic effect of the sensing driving circuit

unit and the Hall device, a signal generated therefrom transmitted to and processed by the

processing unit, which is fed back to an original caller through the extension, the RF

wireless transceiving unit of the host and the phone interface processing unit.

Claim 12. (original) The external bilateral telephone interface remote control

system of claims 10, wherein the feedback module comprises:

a Hall device, disposed on a side of the remote control extension and coupled to a

sensing driving circuit unit; and

a magnet disposed at a side edge of a big gear corresponding to the Hall device for

determining whether the gas switch is closed by magnetic effect of the sensing driving

circuit unit and the Hall device, a signal generated therefrom transmitted to and processed

by the processing unit, which is fed back to an original caller through the extension, the

RF wireless transceiving unit of the host and the phone interface processing unit.

Claim 13. (original) The external bilateral telephone interface remote control

system of claim 10, wherein the lateral enabling stick has two symmetric extrusions,

which are adapted to sleeve into holes within the big gear in circle for rotating the big gear

enabling the lateral enabling stick, as to switch the gas switch, when the spring stick

moves upward.

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Claim 14. (currently amended) The external bilateral telephone interface remote

control system of claim 1, wherein the switch driving module comprises:

a switch driving circuit unit,

a motor module;

a linking rod driven by the motor module; and

a pin engaged with the linking rod capable of being moved by the linking rod; a

metal plate coupled to the pin and a socket; a metal member coupled to a plug; and an

optical sensing unit,

wherein the metal plate and the metal member is able to be connected or separated

due to a movement of the pin, so as to connect or disconnect the socket and the plug, and

wherein the optical sensing unit is able to sense and transmit signals between the

external remote control host and the external remote control extension separate external

addition-type remote control extension.

Claim 15. (currently amended) The external bilateral telephone interface remote

control system of claim 1, wherein the switch driving module is a door knob system, and

the door knob system comprises

a door knob with a coupling member;

a motor module;

a linking rod driven by the motor module;

a pushing module with one end coupled to the linking rod and another end coupled

to the coupling member of the locker, wherein the linking rod is able to moved to activate

the pushing module to drive the door knob to open or close a door; and

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a sensor able to sense and transmit signals between the external remote control

host and the external remote control extension separate external addition-type remote

control extension.

Claim 16. (original) The external bilateral telephone interface remote control

system of claim 15, wherein the coupling member of the door knob is a slit formed on the

knob, and the pushing module is a pushing rod inserted into the slit to drive the knob.

Claim 17. (original) The external bilateral telephone interface remote control

system of claim 15, wherein the coupling member of the door knob is a rough cover.

Claim 18. (original) The external bilateral telephone interface remote control

system of claim 15, wherein the coupling member of the door knob comprises a fixing

member and an adhesive member, wherein the fixing member and the adhesive member

are sleeved into a neck portion of the door knob, and a slit is formed in the fixing member

for receiving the pushing rod.

Claim 19. (currently amended) An external bilateral telephone interface remote

control system, comprising:

an external remote control host, having an input terminal coupled to a phone line

and an output terminal coupled to an separate external addition-type remote control

extension external remote control extension coupled to a wire or wireless switch for

forming a remote control network as to control the wire or wireless switch by a phone,

wherein the external remote control host comprises:

a phone transmitting module, adapted for informing a remote super of

abnormal data detected by the separate external addition-type remote control

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extension external remote control extension and the operation thereof through

preset phone numbers and voice messages, the remote super inputting control

signals via a phone for controlling the wire or wireless equipment;

a memory unit, adapted for storing preset remote control codes, the control

signals and feedback signals from a RF wireless transceiving unit of the external

remote control extension separate external addition-type remote control

extension;

a processing unit, adapted for identifying and processing the control

signals from the phone line, a keyboard of the host and the external remote control

extension;

a display unit, adapted for displaying abnormal data detected by the

sensing unit and the switching driving module of the external remote-control

extension separate external addition-type remote control extension;

a RF wireless transceiving unit, adapted for receiving and transmitting

correct control signals and feedback signals from the processing unit and a RF

wireless transceiving unit of the external remote control extension separate

external addition-type remote control extension; and

an alarm unit, adapted for sending out alarm signals,

the external remote control extension separate external addition-type remote control

extension comprises:

a shell;

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a sensing unit, adapted for sensing a temperature, a pressure, a

concentration, a wind or a PH value;

a switch driving module, adapted for turning on or off the wire or wireless

switch;

a feed back module, adapted for generating a feedback signal thereby

performing the bilateral remote control via the remote control network and the

phone line;

a sensing driving circuit unit, adapted for transmitting said temperature,

pressure, concentration, wind or PH value data to a comparing unit;

a setting unit, adapted for setting values for the temperature, the pressure,

the concentration, the wind or the PH value;

a comparator unit, adapted for determining whether the temperature, the

pressure, the concentration, the wind or the PH value data exceeds the setting

values, whether the switch driving module is turned on and whether a feedback

signal is transmitted to the host;

a processing unit, adapted for identifying and processing a remote control

signal from the RF wireless transceiving unit of the external remote control

extension separate external addition-type remote control extension and the

feedback signal from the feedback module; and

a switch driving module, adapted for turning on or off the wire or wireless

switch.

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Claim 20. (original) The external bilateral telephone interface remote control

system of claim 19, wherein the external remote control host further comprises: a

charging unit, adapted for supplying power to the host when an original power supplied

thereto is turned off; and a host power supply unit, adapted for supplying powers thereto.

Claim 21. (original) The external bilateral telephone interface remote control

system of claim 19, wherein the external remote control host further comprises a

key-board array unit, adapted for keying indexes and phone numbers.

Claim 22. (currently amended) The external bilateral telephone interface remote

control system of claim 19, wherein the external remote control extension further

comprises a charging unit, adapted for supplying power to the separate external

addition-type remote control extension external remote control extension when an

original caller supplied thereto is turned off; and an extension power supply unit, adapted

for supplying powers thereto.